



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,568	08/24/2001	Stefan Paul Keller-Tuberg	Q64991	8849

7590 07/17/2008
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

07/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/935,568	Applicant(s) KELLER-TUBERG, STEFAN PAUL	
	Examiner Dmitry Levitan	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2008 and 14 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Amendments, filed 5/13/08 and 5/14/08 have been entered. Claims 13-26 remain pending.

Drawings

1. The drawings were received on 5/14/08. These drawings are approved.
2. In light of new drawings, Fig. 1-4, and the amendment to the specification, the objections to the drawings have been withdrawn.

Specification

3. The disclosure is objected to, because abbreviations or acronyms ASAM, MBONE are cited throughout the specification without explanation. Applicant should provide a full explanation for the acronyms at least at their first occurrence in the specification.

Claim Rejections - 35 USC § 112

4. In light of Applicant's amendment, the rejection of claims 21-26 under the second paragraph of 35 U.S.C. 112 has been withdrawn.

Claim Rejections - 35 USC § 103

5. Claims 13-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hooper (US 5,671,225) in view of Rothschild (US 6,226,686).

Hooper substantially teaches the limitations of the claims:

A method for providing multicast services on a network comprising a multicast router and a plurality of end user communications equipments, comprising the steps of:

providing a point-to-multipoint connection between the multicast router and the plurality of users

(server/router 200, comprising gateway 201 and network elements 202 and 203, streaming MPEG video from media stream port 240 to multiple clients 10 through unidirectional high-bandwidth path 104, utilizing multicasting 1:60-65, as shown on Fig. 2 and 3:14-4:7);

providing a separate bidirectional flow of control data between each of said end user communications equipments and said multicast router over separate point-to-point connections (providing low-bandwidth bi-directional communication path 105 for exchange of control information between the user and the server/router, separate from the data path 104, as shown on Fig. 2 and disclosed on 4:8-28);

replicating multicast information data from said multicast router to form a separate unidirectional multicast information flow for each of said end user communications equipments (implementing one directional path 104 from the media stream port 240 of the server/router 200 as a multicasting connection 1:60-65); and

transmitting replicated data in the separate flows of multicast information over respective unidirectional point-to-multipoint connections between said multicasting router and respective ones of said end user communications equipments (performing video streaming of MPEG video to the clients over multicasting connection, as described above).

Hooper does not teach using connecting the subscriber nodes with the multicasting router through an access node, wherein the access node is connected with a single, unidirectional

multicast information flow between said multicast router and said subscriber access node and the access node duplicates the data over a point-to-multipoint connection to the end users.

Rothschild teaches using connecting the subscriber nodes with the multicasting router through an access node, wherein the access node is connected with a single, unidirectional multicast information flow between said multicast router and said subscriber access node and the access node duplicates the data over a point-to-multipoint connection to the end users (inherent node of ATM network 110 to originate a point-to-multipoint connection 111, duplicating ATM cells and branching them out, because a node is essential to perform the operation of duplication and branching out in a network, connected with server 105 with a point-to-point link and with members of a message group, comprising of systems 112-115, through point-to-multipoint multicast connections 111, as shown on Fig. 8 and disclosed on 7:14-44.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using connecting the subscriber nodes with the multicasting router through an access node, wherein the access node is connected with a single, unidirectional multicast information flow between said multicast router and said subscriber access node and the access node duplicates the data over a point-to-multipoint connection to the end users of Rothschild to the system of Hooper to improve the system compatibility with existing IP and ATM networks and to connect the bi-directional channel of Hooper to the multicast router/server through an access node of Rothschild to simplify the system design by utilizing the access node for all users connections.

In addition, regarding claims 21 and 25, Rothschild teaches users to join and leave multicast groups, as they wish, therefore making a number of current users of the multicast group

smaller than the number of possible users, as disclosed on 4:35-5:10 and Hooper teaches using bi-directional line 105 for flows of control data, as disclosed on 4:7-24.

In addition, regarding claims 14-16, 18-20 and 22-26 Rothschild teaches point-to-point connection between the multicast server 105 and the access node of network 110 and point-to-multipoint connections between the access node and the users 112-115 as ATM connections to perform IP multicasting, as disclosed on 7:14-44 and using IP protocol to support multicasting, as disclosed on 4:35-60.

Response to Arguments

6. Applicant's arguments filed 5/13/08 have been fully considered but they are not persuasive.

On page 11 of the Response, Applicant argues that Hooper does not teach unidirectional information flow.

Examiner respectfully disagrees.

Hooper clearly teaches unidirectional information flow, shown on Fig. 2 as unidirectional forward data path 104, which is indicated by unidirectional arrow, to deliver video streams from output of server/router 200 to the client 10, as disclosed on 3:66-4:7.

Regarding the point to multipoint limitation, Hooper clearly teaches using multicasting arrangements to deliver information from a server to multiple clients, as disclosed on 1:55-65.

Applicant's arguments, directed to link 105 of Hooper are incorrect, because it is path 104, not 105, which has been used for unidirectional, multicast delivery of information to the clients.

Path 105, has been identified by Examiner to provide separate bi-directional flow of control data (see the claims rejection for details) to/from client 10.

On page 11 of the Response, Applicant argues that server/router 200 does perform routing operations.

Examiner respectfully disagrees.

Examiner matched the multicast router of the claims with a server 200, comprising gateway 201 and network elements 202 and 203, wherein elements 201-203 of the server perform routing operation (see claims rejection for details).

On page 12 of the Response, Applicant argues that Rothschild teaches conventional approach of multicasting without put off replications until the end of the path.

Examiner respectfully disagrees.

Applicant arguments are irrelevant, because they are directed to unclaimed subject matter: put off replications until the end of the path.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
09/935,568
Art Unit: 2616

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dmitry Levitan
Primary Examiner
Art Unit 2616

/Dmitry Levitan/
Primary Examiner, Art Unit 2616